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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,178	04/21/2005	Noam Gavriely	108 05 01 NP US	6763
36131	7590	03/04/2010	EXAMINER	
YORAM TSVION P.O. BOX 1307 PARDES HANNA, 37111 ISRAEL			JANG, CHRISTIAN YONGKYUN	
			ART UNIT	PAPER NUMBER
			3735	
			NOTIFICATION DATE	DELIVERY MODE
			03/04/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/532,178

**Applicant(s)**

GAVRIELI ET AL.

**Examiner**

CHRISTIAN Y. JANG

**Art Unit**

3735

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 January 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 29-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 29-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/22)
- Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is responsive to the Supplemental Amendment filed on January 12<sup>th</sup>, 2010. The examiner acknowledges the cancellation of claims 17-28 and the addition of claims 29-31.

#### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 31 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. Claim 31 recites "temporally segmenting respiratory and sounds and cardiac electrocardiographic signals to express the segments of physiological rhythmicity." The portion "respiratory and sounds" is unclear in meaning and intent. The examiner can think of several possibilities in the intended phrasing. One is "temporally segmenting said respiratory and said cardiac sounds, and cardiac electrocardiographic signals". The other is "temporally segmenting said respiratory sounds and cardiac electrographic signals." While specifications provide support for both interpretations, an amendment must be made to clearly distinguish between the two.

#### ***Claim Rejections - 35 USC § 101***

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 29-31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Method claims must meet a specialized, limited meaning to qualify as a patent-eligible process claim. The test for a method claim is to whether the claimed method is tied to a particular machine or apparatus or transforms a particular article to a different state or thing. The machine or transformation must impose meaningful limits on the method claim's scope to pass the test. This means reciting a specific machine or a particular transformation of a specific article in an insignificant step is not sufficient to pass the test. As applicant's claims fail to recite a specific apparatus in carrying out any of the method steps, they fail to be patent-eligible processes.

***Allowable Subject Matter***

7. Claims 29 and 30 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101 set forth in this Office action.

8. Claim 31 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 101 and 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

9. As to claims 29, the prior art of record fails to teach the temporal segmenting of respiratory and cardiac sounds to express the segments of physiological rhythmicity, averaging the features of segments of heart sounds with respect to the corresponding respiratory cycle while preserving the temporal variability of said segments, and to determine the extent of temporal variability of groups of synchronized stable sound features. Shapiro teaches the use of "phase fixing" the cycles to adjust for small timing differences, thereby destroying the temporal variability of said segments.

10. As to claims 31, the prior art of record fails to teach the temporal segmenting of respiratory and cardiac sounds and/or EKG signals to express the segments of physiological rhythmicity, averaging the features of segments of heart sounds with respect to the corresponding EKG signals while preserving the temporal variability of said segments, and to determine the extent of temporal variability of groups of synchronized stable sound features. Shapiro teaches the use of "phase fixing" the cycles to adjust for small timing differences, thereby destroying the temporal variability of said segments.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHRISTIAN Y. JANG whose telephone number is (571)270-3820. The examiner can normally be reached on Mon. - Fri. (8AM-5PM) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor II can be reached on 571-272-4730. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles A. Marmor, II/  
Supervisory Patent Examiner  
Art Unit 3735

CJ  
/C. Y. J./  
Examiner, Art Unit 3735  
12/17/09